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Foreign Agriculture

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FRONT COVER

Point Four Edition

Cover photograph from the Far East shows one of the world's millions of farm families that can hope to benefit from the economic development plans of the new Point Four program. (Photo courtesy of ECA.)

BACK COVER

Point Four Agricultural Cooperation

Technical cooperation in agriculture, born a decade ago in Latin America of wartime need, has become an important peacetime program, now extending to the Eastern Hemisphere as well.

NEWS NOTES

'Decentralized' Point Four

A longtime aim of the Department of Agriculture, that whenever practicable Point Four activity be carried out at "grassroots" level, is being realized in contracts made with land-grant institutions to perform technical assistance work directly with foreign countries.

In one contract, the University of Arkansas has agreed to have responsibility for giving technical assistance to Panama's agricultural school, the National Institute of Agriculture at Divisa. Purpose of the joint effort will be to develop a strengthened agricultural center at Divisa and to establish a national extension service to advise Panama's farmers.

As other needs develop, additional United States agricultural agencies, governmental and private, will be called on to further assist on special problems.

Direct participation of State institutions in Point Four work has been endorsed by the Association of Land-Grant Colleges and Universities.

55 Technicians Represent OFAR

Fifty-five agricultural technicians of the Office of Foreign Agricultural Relations were working in foreign countries on Point Four projects at the beginning of this year. Because of the rapid expansion in the over-all Point Four program, it is expected that this number will be increased to 150 by midsummer.

Credit for photographs is given as follows: p. 28, Embassy of Ceylon; p. 33, Ralph S. Yohe; p. 37, Extension Service; p. 38, Soil Conservation Service (Craig Rosborough); p. 40, Joint Commission on Rural Reconstruction; p. 43, Economic Cooperation Administration.

Correction: p. 246, fol.: Teuravuoma is near latitude 65° N.

FOREIGN AGRICULTURE
ALICE FRAY NELSON, EDITOR

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Point Four and Peace

by HENRY G. BENNETT

The security of our Nation and of our people is a subject that is uppermost in all of our minds. All of us are deeply concerned with the immediate threat to the freedom and well-being of the United States of America. All of us must think this problem through together if we are to arrive at a wise and courageous course of action.

I am no expert on military matters—but I would like to point to an arm of our defense which, in my opinion, is no less powerful and no less essential to our survival as a free nation. That arm of American defense is the Point Four program for the economic development of what are called the "underdeveloped" areas of the world.

Military rearmament is an unhappy necessity. Economic development is not only a necessity, but a great and inspiring opportunity. It is an opportunity to sow the seeds of democracy among people who no longer accept poverty, disease, and ignorance as inevitable facts of life. It is an opportunity to create new wealth for the benefit of all free peoples. Finally, it is an opportunity to win friends and allies for our cause. And, believe me, we need strong friends and allies, now and in the years to come.

For all these reasons, the Point Four program of economic development is in the truest and broadest sense *good business* for Americans.

What do we mean by "economic development?" Perhaps our own history provides some of the answers to this question. If we look into the American past, we see that there have been three key elements, all closely tied together and all essential to the development of our free and prosperous society: first, the untapped wealth of natural resources; second, the application of capital; and third, the energy and skill to produce.

We in this country have been blessed with natural resources: the wealth that lies dormant in our forests and rivers, in our soil and beneath our soil in mineral and oil deposits. In the underdeveloped areas of the world where the Point Four program now operates, in Latin America, Africa, the Middle and Far East, there is likewise an untold wealth of natural resources, waiting to be surveyed, worked, and harnessed to human needs.

Our brief experience in working with the governments of these underdeveloped areas has proved beyond a doubt that the earth's surface has only begun to be scratched, and that it has only to be scratched to reveal immense untapped sources of new wealth. The people of these areas need the potential wealth of food and raw materials that is all around them. So do we. So do the Europeans who depend on the primary products of these areas for their industries and their livelihood. Today vital materials are almost entirely locked away. They are as effectively denied to the people who need them as though they existed on the moon. Yet the keys to unlock this wealth are in our hands, and theirs.

The Point Four program is a highly economical means of spreading knowledge and skills. It is a powerful arm of American diplomacy, not only for the future but for today. It is the best and soundest opportunity to invest in peace that has ever been offered to Americans or any other great people.

Dr. Henry G. Bennett, Point Four Administrator.

Dr. Bennett is Administrator, Technical Cooperation Administration, U. S. Department of State.

Ceylon Signs First Point Four Agreement

At a recent date the Government of Ceylon signed a "standard general agreement for technical cooperation with the United States" and thereby became the first nation to formally establish this relationship under the new Point Four program.

The event is considered significant, both because the agreement sets a precedent for Point Four working relationships and because it paves the way for international cooperation to raise Ceylon's levels of living.

Article 1 of the agreement says that the two countries will cooperate "in the interchange of technical knowledge and skills and in related activities designed to contribute to the balanced and integrated development of the economic resources and productive capacities of Ceylon."

Article 2 says that the two countries will keep their citizens informed of progress resulting from the collaboration.

Article 3 states that "the Government of Ceylon agrees to bear a fair share of the cost."

Article 4 gives assurances to the visiting technicians from the United States, including exemption from Ceylonese taxation and according of diplomatic privileges.

Article 5 provides for the agreement to remain in effect indefinitely, unless either Government gives written notice that it wishes change or termination.

Ceylon, a small country lying off the southeast tip of India, achieved independence in recent years and in its new status is actively trying to improve its economy. Agricultural improvement is one of the principal aims, especially in the realm of food crops. Ceylon historically has been a heavy exporter of three "money crops," tea, rubber, and coconuts. Despite having rich agricultural resources, however, its production of food crops is low. As a result, the island is forced to use about half of its available foreign exchange in importing such foods as rice, flour, and sugar. The Government hopes to bring the island's agriculture into better balance by encouraging more production of food crops and also plans to carry out a modest program of industrialization. Increased food production is expected to come from bringing more land under cultivation and by raising production per acre through improved farming methods.

Ceylon and the United States began to collaborate on the country's food production problems even before the formal Point Four agreement was signed. In July 1950 the U. S. Department of Agriculture sent J. M. Thomason, a veteran agricultural extension worker in rice-growing areas of Arkansas, to Ceylon as advisor to the Ministry of Agriculture. He has been working actively there since that time

Ceylon is stimulating more home industry, as exemplified by this mat weaving, as an accompaniment to greater production of food crops.

and will be joined by other Point Four technicians.

Mr. Thomason reports from Ceylon that as the agricultural improvement work goes forward, it is basically of a "grassroots" nature—close to the needs of the people. As an example, he has cited the following newspaper story from the capital city of Colombo, herewith quoted in part:

"Simple domestic pursuits—all potential money-spinners—which would accumulatively swell rapidly the national wealth of this country, if every rural homestead adopted at least some of these occupations, were advocated by the Prime Minister, Mr. D. S. Senanayake, when he addressed a rally of young land girls and farm lads, at the inauguration of the first officially sponsored Young Farmers and Landgirls' Club at Keenadeniya, Ambepussa.

"The rural hamlet of Keenadeniya, in the Prime Minister's constituency, was astir from an early hour yesterday for the launching of this novel venture in promoting a love of agricultural pursuits among the young people in rural areas.

"The Prime Minister chose to approach his young audience as 'one farmer to another.' He swiftly dispelled the illusion that to be a successful farmer one had necessarily to have broad acres and vast herds of livestock.

"He preferred to instil in his youthful listeners the idea of every rural homestead being made a productive farm by the adoption of simple and inexpensive methods all of which would help to fill the domestic exchequer. . . .

"If the thousands of rural homesteads dotted all over the country adopted these simple pursuits and sought to rehabilitate themselves financially and secure self-sufficiency in food for themselves and others, the accumulative national wealth, he believed, would be many times the total of the country's present chief money crops, tea, rubber, and coconuts."

Liberia's Expanding Economy

by OSCAR W. MEIER

A General Agreement for technical assistance and cooperation between the United States and Liberia was signed in Washington on December 22, 1950. In signing the Agreement, Liberia became the first country on the African continent to participate in this new program.

To Liberia, however, Point Four is new in name only. Ever since 1944, two American technical missions—the United States Economic Mission and the United States Public Health Mission—have been working closely with the Liberian Government on a program of economic and social development.

As a result of its experience with these two Missions, Liberia was among the first to submit its request for technical assistance under the new legislation. This request is embodied in a proposed 5- to 10-year program of over-all economic development that was worked out during the last year by a joint committee of Liberian and United States officials. This long-range program is estimated to cost approximately $32 million, including the salaries and allowances of the technicians that are requested under Point Four. The other costs, which are by far the larger share of the program, are to be borne by the Liberian Government out of its current revenues and from loans that it is now negotiating.

About $4.5 million of this $32 million are to be spent directly on agricultural activities. Among these projects will be the building of an agricultural research laboratory, the establishment of an agricultural credit corporation, the expansion of research and extension, and the development of pilot projects for improved processing of Liberian products. The expenditure of more than $11 million for roads might be considered indirectly a part of the agricultural program since these roads are being built to open up currently inaccessible areas of the country for agricultural and forest development.

Although the State Department has carried the major responsibility for the work of the Economic Mission in the past, the new program will become a joint responsibility of a number of agencies of the United States Government. For example, the Department of Agriculture will assume technical responsibility for all assistance provided in the agricultural field and the United States Public Health Service will continue to be responsible for the technical aspects of public health assistance.

Simultaneously with the signing of a General Agreement for technical cooperation, the two gov-

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Mr. Meier is Chief, United States Economic Mission to Liberia, Office of African Affairs, U. S. Department of State.

St. Paul River bridge links western Liberia with the harbor and capital. Improved transportation facilities will open new areas to farming and forestry.

ernments also signed a Memorandum of Understanding for the establishment of a Joint Commission for Economic Development. Liberia will appoint a maximum of seven members on the Commission and the United States a maximum of six members. The Commission is expected to make periodic reviews of the development program's progress, advise the two governments of its findings, and make recommendations that will increase the effectiveness of the program through its successive stages.

Through its traditional open-door policy, Liberia has for many years attracted private capital investment. In 1926, Harvey Firestone selected Liberia for the establishment of his rubber plantation operations. These plantations, totaling nearly 100,000 acres, supplemented by the plantings of several Liberian rubber growers, now produce the principal export of the country. Exports of rubber in 1951 will amount to about 35,000 tons, a great deal of which is being shipped as liquid latex for specialized use. Even though small in relation to our total need, we were most thankful for the natural rubber that came from Liberia during World War II. In 1913, when Far Eastern supplies were almost entirely cut off, about one-half of the natural rubber that entered the United States came from Liberia.

For many years, coffee was Liberia's principal export, but production has fallen off greatly during recent years. A major activity under the technical cooperation program will be the reestablishment of coffee as an important crop in the Liberian economy. Cacao production also has attracted much attention recently. During the past 3 years, the Liberian Department of Agriculture and Commerce assisted by the Economic Mission has stimulated the planting of more than 10,000 acres of this crop. The economic development plan proposes to expand cacao plantings to at least 150,000 acres in the next 10 years. A new company organized under the sponsorship of the late Edward R. Stettinius, Jr., is one of the private enterprises now actively engaged in the planting of this crop.

Another of Liberia's important products is palm oil. The wild oil palm grows throughout Liberia, but at the present time most of this crop is harvested and processed by the simplest of hand methods. A pilot project using small presses for extracting the pericarp oil, hand-operated cracking machines to crack the nuts, and 80-gallon kettles for cooking the oil is now in operation. If the pilot project proves successful, it is anticipated that many small village-type cooperatives will be developed throughout the country to acquire these units and make them available to the people in each village.

A forest survey, by a member of the Economic Mission who served with the United States Forest Service prior to his work in Liberia and who has since returned to that agency, has laid the basis for the development of Liberia's forest resources. This survey, made from aerial photography supplemented by hundreds of miles of ground cruising in the forested areas, reveals that more than one-third of Liberia is still covered with high forest. Many new woods, a number of which were previously unknown commercially, were identified in this survey. Under the Point Four program, it is proposed that the forest survey work be continued and that a program for conserving its forest resource be developed by the Government of Liberia.

The work that has been under way to improve Liberia's domestic food supply (discussed in some detail in the May 1950 issue of *Foreign Agriculture*) will be continued and expanded under Point Four. With the foundation already laid, the building up of the food supply both in quantity and quality is expected to be rapid.

No story of modern Liberia is complete without some reference to the excellent new harbor and free port at Monrovia, which was opened to commerce in July 1948. This harbor with its 30-foot channel was built under a lend-lease agreement between the United States and Liberia and gives Liberia one of the finest harbors on the West Coast of Africa. Ships of all nations may enter this harbor in the order of their arrival at the harbor's entrance. Many shippers and ship operators are learning the advantages of a free port (a designated area into which goods may be brought for transshipment, storage, mixing, blending, packaging, or actual manufacture without payment of duty or any customs formality) and are routing cargo through this port from many points along the West African Coast. A Dutch ship, for example, in loading cargo for the Netherlands at a number of small ports along the West African Coast, may run into an isolated shipment or two for the United States. Such a shipment may be so small that it is unprofitable for an America-bound ship to call for it. With Monrovia operating as a free port, however, it is a simple matter for the Dutch ship to lift the cargo at the port of origin, carry it to Monrovia, and unload it for transshipment on a United States-bound ship. The advantages of operations of this type, plus the increasing flow of trade originating in Liberia and adjoining French Guinea and the Ivory Coast, promise to make Monrovia one of the most active ports on Africa's West Coast.

In conclusion, it now appears that the hardy little Republic, which for more than a hundred years had to struggle for its very survival, may become one of the best examples of how free and democratic nations can work to the mutual advantage of each other under the Point Four program.

Greater self-sufficiency in food is one of Liberia's aims. Walter Wynn, Principal of Booker Washington Institute, discusses poultry production possibilities with William Tolbert, member of the Liberian House of Representatives, Gabriel L. Dennis, Liberia's Secretary of State, Oscar W. Meier, and two of the country's former Presidents—Edwin C. Barclay and C. D. B. King, now Liberian Ambassador to the United States.

Egypt—Yesterday, Today, Tomorrow

Egypt and the United States have negotiated a Point Four agreement designed to improve Egyptian farm life, which is described below.

by RALPH S. YOHE

Nakht was a minor official at the court of the pharoah around 1400 B. C. He owned many fields in upper Egypt near the capital city of Thebes. In the spring, laborers plowed his fields with oxen hitched to crude wooden plows or turned the rich Nile-made soil with heavy hoes. Others crushed clods with hammers and broadcast wheat over the fields by hand. At night they walked in groups back along the irrigation ditch to their small one or two rooms in the crowded village made of sun-dried brick.

When Nakht died, artists painted these scenes on the walls of the tomb where his mummified body was placed. The tomb was sealed and soon forgotten.

Well over 3,000 years have passed; and where American archaeologists recently found the tomb of Nakht, the small farming village of El-Qurna now stands. In the spring the farmers of El-Qurna go out to the irrigated fields nearby to turn the rich soil with crude wooden plows hitched to oxen or by hand with heavy iron hoes. They broadcast the wheat by hand. In the evening they return in groups, along the irrigation ditch, to their one or two small rooms in the mud village of El-Qurna. Farm life in Egypt seems to be frozen to the pattern of the pictures that I saw painted on the tomb of the ancient landlord Nakht, who lived more than a hundred generations of farmers ago.

One of many reasons for this unchanging pattern is that there are too many people on too few acres. Most of Egypt is a desert, across which threads a narrow ribbon of green—the rich, irrigated Nile Valley. In this intensely farmed valley, that makes up a mere 2½ percent of the land of Egypt, live nearly 20 million people in one of the most densely populated regions of the world. From 1,500 to 2,000 people live on every square mile. About 70 percent of these people live the lives of farmers—fellahin—and tend, with nearly unbelievable care, three crops each year of vegetables, grain, cotton, and clover.

A few miles out of Cairo, I visited one of these farm villages, Sendion. Like most farm villages, it is a thick cluster of houses crowded up against an irrigation ditch.

Some of the older people volunteered to act as our guide through the village. We headed up the narrow dirt street, hemmed in by two-story adobe houses, past women selling roasted peanuts. We stopped at the local weaving factory. Here village men sat at some 20 handlooms weaving cotton cloth. One man weaves about 12 feet a day and earns around 40 cents, considerably more than he would earn as a field hand.

More factories are badly needed in Egypt, to syphon off the surplus farm people. As it is, they must remain on the land, further increasing the number who must earn a living from the soil.

We walked through a door in a mud wall into the small garden court of the local beekeeper. In addition to the few stands he has himself, he looks after the bees belonging to the village. He took us through his rabbit hutch housed in a small adobe building. Here he showed us improved varieties of Belgian hares but explained to my interpreter that rabbits were difficult to keep in the village. They seem to come down with one disease after another. Of more interest to me was a large dome-shaped pigeon roost on one of the buildings next to the court. I supposed that he kept the pigeons for meat since I had seen women selling squabs in the market streets of some of the towns. But he told me that he kept them for the rich manure they make, which he sells to farmers for their land.

Nitrogen fertilizer must be used to keep up the high fertility of the soil, and every bit of manure is carefully saved. In addition, Egypt imports around 600,000 tons of nitrogen fertilizer a year.

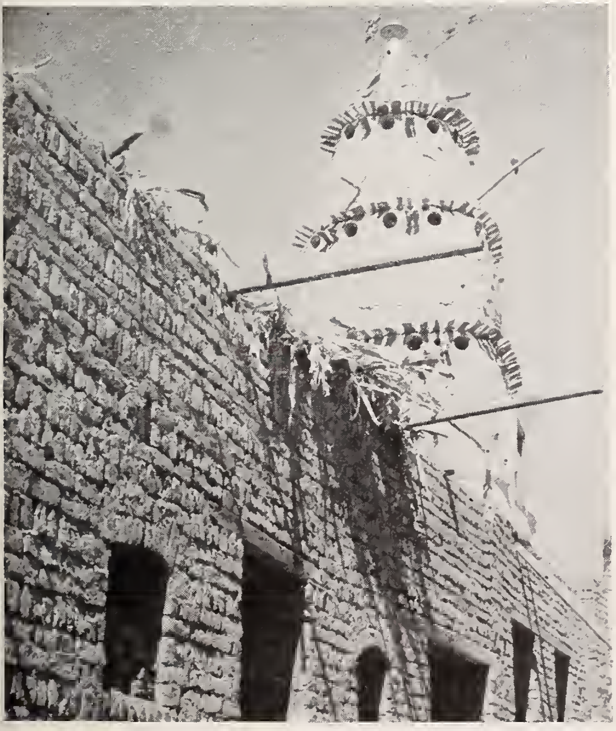
Mr. Yohe, an editor of *The Prairie Farmer* magazine, presents impressions of Egyptian agricultural life as gained on a trip to that area in the summer of 1950.

With plenty of rock phosphate, it exports about 330,000 tons annually.

As we walked down the path along the irrigation ditch toward the fields, we met donkeys jogging toward the village with loads of green Egyptian clover. Across the ditch, three camels moved in solemn procession.

Nowhere in the world can you see more graphically the importance of water than along the irrigation ditches of Egypt. These ditches are the fellah's only defense against the encroaching desert. They carry water to irrigate his fields. Here he brings his livestock to water. Here his wife washes the few clothes belonging to the family or scours her few cooking pots and pans. Frequently during the day, the fellah lies on his stomach to drink from the ditch and here in the evening he bathes himself.

We passed a small orange grove and plots of broadbeans on our way to see a group of water buffalo herded out in a field of clover. Highly adapted to the hot climate of Egypt and immune to many pests and diseases, the water buffalo furnishes the farmer with power, meat, and milk. But only the better-than-average farmer in Egypt owns any livestock. And then he generally owns no more than a buffalo cow or a cow, a donkey, a few chickens, and one or two sheep or goats.



A pigeon roost in Sendion, badge of a prosperous farmer. Pigeons are kept for their rich manure, which the farmer either sells or uses on his own fields.

With the pride of farmers everywhere, the villagers showed me their new buffalo bull from the Government breeding station. The Egyptian Government has developed some very good high-milk-producing strains of water buffalo.

As we walked along, we saw a man measuring off his clover with a long measuring cane pole, just like the measuring sticks I saw painted on the walls in the tombs of the kings of ancient Egypt. His field was very small as are most fields in Egypt. More land is the big need of most Egyptian farmers. Three-fourths of them are tenants. More than half of the cultivated land is in big estates, and 95 percent of all landowners have 5 acres or less. Estimates place the amount of land needed for a family to earn a basic standard of living at 4 to 5 acres.

The Government is trying to increase the amount of irrigated land by building dikes to hold back the sea water in the salt marshes of the Delta, similar to those in Holland. Long-range plans call for increasing the height of the Aswan Dam. But even these will add only a maximum 2½ million acres unless large-scale projects are built on the upper Nile in the interior of Africa. Some steps are being taken toward land reform too. I understand that about 5,000 acres a year are being turned over to landless farmers.

On the way back to the car, we passed the Government's modern new health center. Basically designed to teach the villagers the rudiments of sanitation and simple hygiene, the center has also taught the farmers the value of improved crop varieties and better farming methods. The center helped establish the weaving factory we saw and a knitting factory. Villagers told me that they were living better since the center came. A model for others, Sendion is one of 125 such centers that the Government hopes to establish in more than 1,000 villages.

In sharp contrast to the primitive methods of agriculture on the land is the Ministry of Agriculture, with its up-to-date experiment stations and highly trained personnel. Lacking so far has been an American-type extension service and an elementary education system to equip the farmer with the knowledge gained in the experiment stations. Important among the Government's activities has been the sponsorship of farmer cooperatives, which now have 150,000 members.

These are promising beginnings that the Government has made in improving rural life. How far they will go is yet to be seen. At best, the Government faces a tremendous job, which, even with Point Four aid, will present a long-time challenge.

Agricultural Point Four Reaches 22 Countries

The United States Government and 22 countries are today cooperating in Point Four programs of agricultural improvement. (See map on back cover.) During this new year additional countries will be added as plans now being negotiated go into effect.

The United States Department of Agriculture, in cooperation with the Department of State, is participating in projects in 21 of these countries, and the Institute of Inter-American Affairs of the Department of State is carrying on food-supply projects in 4 of them.

A majority of the projects have been in operation for several years, having been set up under legislation prior to the recently enacted Public Law 535. (This law is known popularly as the Point Four program since it stems from the fourth point of President Truman's inaugural address in which he listed technical assistance to underdeveloped countries as a basic part of American foreign policy.)

Public Law 535 was signed by the President on June 5, 1950, and the then-existing technical cooperation projects were incorporated in the new program. Within the Department of State was established the Technical Cooperation Administration to direct the carrying out of the Point Four work. This work, in addition to agriculture, also includes such fields as public health, education, and natural resources.

The actual operations are being carried through assignment of projects by the Technical Cooperation Administration to the various appropriate agencies of Government, as exemplified by the current activity of the Department of Agriculture in 21 countries. Other agencies actively participating are the Departments of Interior, Labor, and Commerce, the Federal Security Agency, and, in Latin America, the Institute of Inter-American Affairs.

The projects are being carried out, for the greater part, by the stationing of United States Government specialists in each cooperating country and they, in turn, work with the specialists of each host country. A total of approximately 350 such United States specialists are now working in 36 countries.

In addition to such bilateral activity, the facilities of the United Nations are being used wherever practical. Of the $34.5 million appropriated by the Congress for Point Four work during the 1951 fiscal year, $12 million was transferred directly to the United Nations to facilitate the carrying out of multilateral technical assistance activities.

The cooperation in agriculture extended by the United States Government varies in nature from country to country, depending on the needs expressed in each negotiated agreement. In Bolivia, Ecuador, El Salvador, Guatemala, Nicaragua, and Peru, for example, agricultural stations have been set up and the research, extension, and education work is beginning to provide new agricultural leadership within each of the countries.

In Costa Rica, Haiti, Paraguay, and Peru, special attention is being paid to food needs of the people through food-supply programs of the IIAA.

In Bolivia, Brazil, Colombia, Costa Rica, the Dominican Republic, Guatemala, Haiti, Mexico, Panama, and Peru, a special project is being carried on to control disease of and improve production of natural rubber.

In Cuba, attention is focused on cooperation to increase the production of soft fibers, needed in large quantity by the sugar industry for bagging its huge annual crop.

In countries of the Eastern Hemisphere, agricultural specialists of the United States are working principally as advisers to ministers of agriculture, especially in the field of improving agricultural research, extension, and education. Ceylon, India, Iran, Pakistan, the Philippine Republic, and Thailand are the six Eastern countries with whom such cooperative relationships have been established.

In general, the Point Four program is operating mainly in Latin America, Africa, the Near East, and South Asia. In the European Colonial Areas of Africa, the Economic Cooperation Administration and Point Four will work on parallel lines. In Southeast Asia, where technical assistance is part of a larger program of economic aid, ECA has been designated by Congress as the operating agency.

Parasite Control

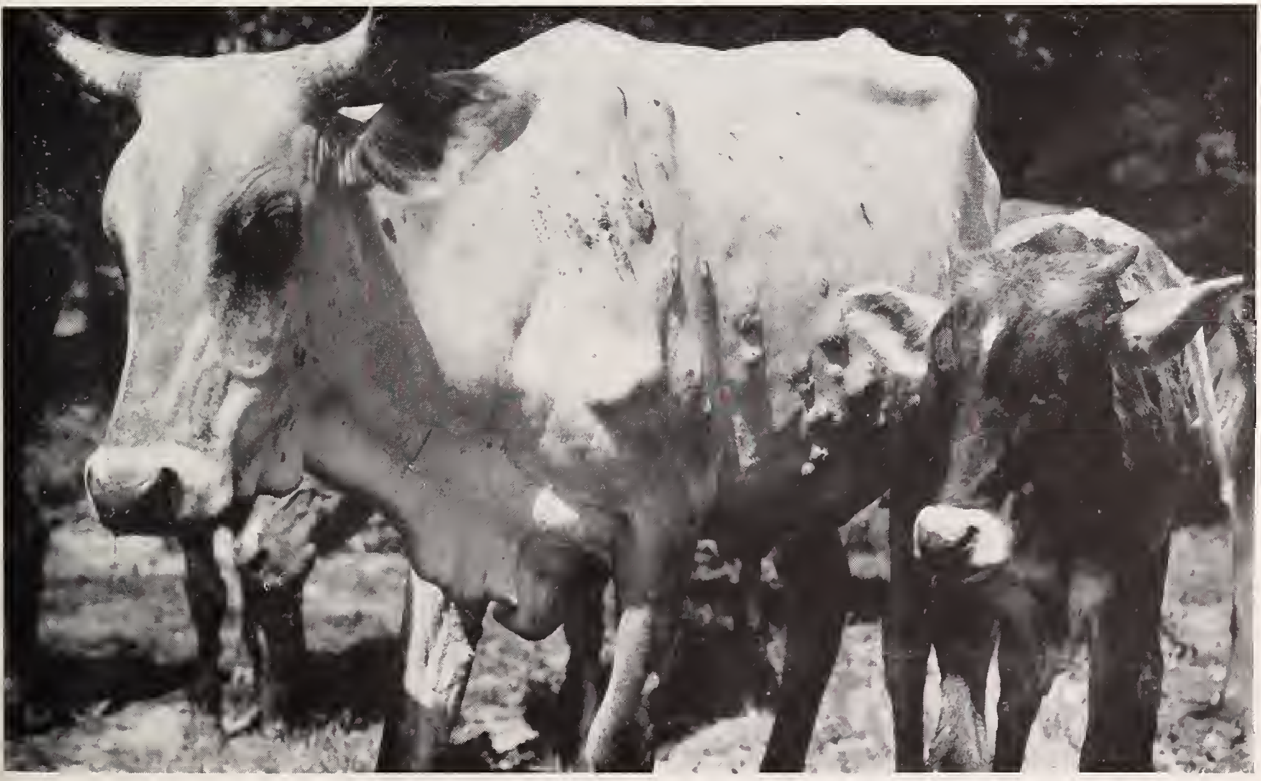
Livestock growers of tropical Latin America at last can look forward expectantly to a new era in which modern science will help control the many insect pests that long have ravaged their cattle.

New insecticides, introduced through Point Four cooperation, are bringing them this promise. The development reflects successful three-way technical collaboration between United States industry, the United States Department of Agriculture, and agricultural leaders of Latin America.

Ticks, flies, lice, and especially the "torsalo" grub are the perpetual plague of Latin America's tropical livestock. They take a heavy toll of meat, milk, and hides, even causing cattle deaths. Heretofore, insecticides have been only partially effective.

New insecticides were developed during World War II, among them toxaphene and benzene hexachloride. Livestock growers of the United States immediately found the new products highly effective. More recently the insecticides were introduced into Latin America where tests made by cooperating Point Four technicians in Ecuador and Nicaragua indicated equal all-around effectiveness there, including control of the old enemy, "torsalo."

These U. S. and Nicaraguan technicians, shown mixing a toxaphene solution, have successfully proved its value in controlling tropical insect pests.



Native cow and calf of Central America, both badly infested with "torsalo" grub, *Darmatobia hominis.*

Fiber Development

In Cuba, Point Four cooperation means "kenaf," for that is the crop on which the United States and Cuban Governments are concentrating their technical collaboration.

Kenaf is a fiber that resembles jute. Cuba needs it as a supplemental source of bagging for its huge sugar crop; the rest of the American world needs it, too—not only for bagging but also for burlap, cables, twine and rope, and as a base in rugs and carpets.

Since early days of World War II, when experiments in Cuba with various fiber plants proved kenaf to be the most promising for that environment, scientists of the Cuban Ministry of Agriculture and the United States Department of Agriculture have been working together as members of the Cooperative Fiber Commission (U. S. participation is now part of the Point Four program). They have studied the plant's cultural requirements and have experimented with methods of defibering it. The first commercial crop was grown in 1948 and sold to spinners in the United States; they found it satisfactory and are now extending their cooperation to the Cuban project. A completely mechanized fiber-extraction process is the goal of the Point Four technicians in Cuba, and they are hopeful of achieving it soon.

As kenaf production spreads through tropical and subtropical America, the Western Hemisphere at last will have a supplemental source of soft fiber that is both economical and accessible.

Coffee Cooperation

Most people know that the coffee they drink is a product of the Western Hemisphere—of Central America, Brazil, Colombia, Ecuador, and Peru—and they know that for some time the price has been going up. But what many of them do not know is that the average coffee tree yields only 1 pound of clean coffee a year, that about two-thirds of the selling price goes to pay for costs, and that coffee growing is a marginal enterprise.

New activity is springing up in producing areas, however, as awareness grows that low productivity is the crux of the coffee-supply problem. In Brazil a coffee station is doing basic research; in Colombia the Federation of Coffee Growers has a section devoted to extension work; in Costa Rica the Government has a coffee-improvement program, the Inter-American Institute of Agricultural Sciences at Turrialba is making efforts in the same direction, the U. S. Department of Agriculture is working on the coffee plant's diseases, and the cooperative agency STICA is doing extension work. In Nicaragua the Servicio Técnico Agrícola, a joint station of that country and the United States, has begun a coffee-improvement program; in El Salvador a group of public-spirited citizens who call themselves Amigos de la Tierra are working to increase coffee productivity, as is the Salvador-United States station, Centro Nacional de Agronomía. In Mexico a coffee commission has been organized; and in Guatemala the jointly operated station, Instituto Agropecuario Nacional, also has a coffee program.

Promising results are coming out of this work. In Guatemala, for example, Point Four technicians of the cooperative station, Instituto Agropecuario Nacional, in their search for trees with a potential for big yields, have found some that produce as much as 8 pounds a year, and have collected 37 different varieties that both grow and yield better than the varieties now known to commerce. In one experimental planting technicians are using unconventional cultural methods and are already getting yields 7 times larger than those from the usual commercial plantings.

Cacao Rehabilitation

Chocolate and cocoa, delicacies for millions of people and money-earning exports for many countries, are among commodities being assisted by Point Four technical cooperation. Such cooperation is now making itself felt in Ecuador, whose cacao plantations once supplied the United States with some of its finest chocolate and cocoa but now are ravaged by disease—notably witches' broom and pod rot.

Conquest of these diseases seems to lie in the development of a variety that will resist them and yet maintain high yields. In Pichilingue, at the tropical substation of Estacion Experimental Agricola del Ecuador, scientists of the United States Department of Agriculture are working under Point Four with local technicians to find such varieties. For 7 years they have collected uninfested clones from near and far, even from other countries. Tests have turned up several promising varieties; and these the technicians are propagating for distribution to cooperators in different parts of the cacao regions.

Exchanging "Know How"

by DOUGLAS ENSMINGER

The exchange of agricultural "know how" through the exchange of people has become big business. From last July until July 1951, more than 3,000 agricultural leaders from 77 friendly countries will have visited the United States to learn about our agriculture. Conversely, the flow of people is also in the opposite direction, for American farm leaders, farmers, and agricultural scientists and students, by the hundreds, are seeking to broaden their knowledge by visiting other lands.

This first-hand observing of the ways of life of other countries, on what amounts nearly to a mass-production basis, is something new to history. It reflects "open door" educational policies that should contribute substantially to greater cooperation and trust among participating nations.

Recently the Department of Agriculture received a letter of thanks from a German forester who has been studying the forestry methods of the United States. It is typical of the many that are received from foreign visitors. It said, in part: "I started this year my trip with a little suspicion. After a lost war and all the bad things made by the Nazi regime, I could understand if your people would be a little mad on the German visitors. But it happened only the contrary. All the American people I met were very kindly, and I felt myself never an foreigner guest. Sometimes it happened I met old soldiers—we fought against each other in the last war; today we made nice parties. Only a crazy politick started this war. You have a real freedom here and I hope all the other world may get it too."

United States 4-H Club members leaving for Europe, to spend a summer living and working with farm families of 13 countries.

The vast populations of the world are pressing today for improved living conditions. It is only proper that we aid their agricultural leaders in their quest for ways and means of making their agricultural resources provide higher and more secure levels of living. The way to early and lasting improvement must of necessity come through an improvement of their agricultural "know how."

The United States is in a fortunate position to give leadership to this venture. Ours is a progressive nation whose very foundation stones were laid through an exchange of "know how." When the Pilgrim Fathers came to this new country, they brought with them some seeds, a few implements, and the farming knowledge of the Old World. In order to survive they had to add to their competence by adopting the crops and many of the methods of the native American Indians. Thereby they set in motion an exchange of agricultural abilities between the Old World and the New that through the decades has continued and gathered momentum.

For many years the United States Department of Agriculture and the land-grant colleges and universities have been the Nation's principal storehouses and distributors of agricultural "know how." Traditionally, farm families have taken their problems in farming and homemaking to them for solution. The Department and the State institutions in turn have sought the answer to these problems in their

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research laboratories, in the field testing plots, and through a continuous examination and sifting of experience throughout the world. Meanwhile the cooperative extension workers have been equally active in taking the answers back to American farm families and helping to work out ways and means of applying these answers.

In no small measure the high American standard of living and the advancement in American production and marketing methods are the products of this joint Federal-State activity.

The broadening of this domestic exchange of agricultural information to world proportions is a natural accompaniment of the Nation's expanding international responsibilities. The activity has grown rapidly in the decade since Congress passed the first legislation to facilitate it. Initially, the legislation was concerned with interchanging "know how" among the American republics. The first law called for an exchange of information and students with the other Republics, and later was expanded when money was appropriated to the Department of State for awarding training grants to Latin American technicians and leaders for study in the United States.

Legislation making the exchange program world-wide was passed in 1948, and an increasing number of people from other areas came to the United States to study many phases of American agriculture. Then in June 1950 Public Law 535, "Act for International Development," was enacted. Under this new Point Four program it is possible to further expand the world-wide exchange and to give guidance to it.

(Other international activities also are adding to the exchange. The Economic Cooperation Administration, for example, during 1951 is sponsoring the visit to the United States of some 1,400 agricultural leaders from the Marshall Plan countries.)

To direct this world exchange, the land-grant colleges and universities and the Department have created a Joint Committee on Technical Services to Foreign Areas. One of the Committee's important decisions is that the State institutions and the Department must accept the leadership in this exchange of agricultural "know how" as a major and highly important program for the next generation. The sincere feeling has been expressed that through this accelerated exchange of agricultural knowledge the free people of the world may gain new hope, improve their level of living, and more actively engage in the business of making democracy work.

A Brazilian agricultural trainee applies his soil conservation schooling to an Arkansas farm.

Asia's Land Problems and The American Revolution*

By SECRETARY OF AGRICULTURE CHARLES F. BRANNAN

As we know from recent experience, the struggle between freedom and totalitarianism is at a critical point in Asia, and the outcome in Asia is of critical importance to the entire world.

Half of the people of the world live in Asia, and eight out of ten of those people are peasants. In spite of great effort by their governments, most of those peasants still live in abject poverty. Their tools are primitive and their farms are very small. They have little part in world trade.

Few Asian peasants own the land on which they toil, and few have any hope of owning the land. Unlike United States tenants, they are completely dependent on their landlords.

Yields on much of the land are low, but the peasant is often not interested in improving them. He is not greatly impressed by irrigation projects and other improvements when it is not his land that will be improved. He has little hope of gaining from such developments; there are plenty of peasants who will work the land in return for just enough food to keep their families alive. Therefore, how can one peasant hope to be given more than he is now getting from his landlord? He has no incentive.

This is related to our Point Four program of technical assistance to other countries. That assistance will do little good unless the family on the land welcomes and uses the knowledge.

There are some exceptions to this dark picture, but for the most part the Asian peasant is about as nearly without hope as it is humanly possible to become. That is, he *has* been without hope—today, it may be a little different.

All over Asia, communists are spreading the word that the land is to be divided up. But the truth is that the so-called land reform of communism consists of transferring land from feudal landlords to a feudal government. The peasant does not know this; hence, his unrest provides the "soil" in which some form of totalitarianism breeds.

An attack upon this problem is the most direct way by which democracy can win over communism in the struggle for the minds of men—a struggle we must win if we are to achieve peace.

In the first place, we can never make it too clear to the people of the world that the principles of the American Revolution guide American democracy and commit us to the cause of human improvement everywhere.

The American Revolution was not merely a military revolution; it was based on ideas and ideals. The American revolutionists were insisting that all men are born to be free, that the rights of man are inherent, God-given, not subject to bestowal or denial by temporal powers. Americans still believe that these ideas and ideals are the only basis for solving the problems of everyday folks.

In the second place, we should by all means make clear that our country has had experience in dealing with such problems as are faced by the farm people of Asia, the Middle East, Africa, South America—problems of land tenure.

I shall not attempt to trace the entire history of United States land policy. However, the facts show that the public made land available to farmers either freely or at low prices during our early development period and that the public has helped in many ways to keep the farm land in the hands of the operators. This is still the policy of our democracy.

For example, the American public has provided capital funds for cooperative farm credit associations and has legislated low interest rates and long terms for repayment of farm purchase loans. The public shares with the individual farmer the cost of conserving the soil. At the same time, the public finances agricultural research and extension services so that all farmers, little as well as big, can be well informed on scientific techniques of good farming.

The point should be noted that our country recognizes no class barrier between landowners and land tenants. Every year, many tenants become owners. Our tenure system is not perfect, but, relatively, it is very good, and our history indicates we will continue to make progress.

I am convinced that the increasing productivity

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* Adapted from an address before the Association of Land-Grant Colleges and Universities, Nov. 16, 1950.

Formosan farmers discussing their aspirations for land ownership with Government officials.

of our agriculture and the growth of our industry alongside agriculture are due not only to our resources and science but also to the tenure system that provides an incentive for profitable production. Not so many years ago, 80 percent of our people lived on farms, as is true in Asia today. Now we have reversed the figures, and fewer than 20 percent of our people are farm people. Early in our history, one farm worker could supply food for himself and only about three other persons. Today one worker can supply 14 other persons. Without this change, our modern industry would be impossible, and without such a change modern industry is impossible in other lands. Without such a change, world trade is severely restricted. Certainly there is no market for modern tools and machinery where the farmers have neither land nor incentive.

Let us make it clear to all that the principles of American democracy are being applied in our foreign policy with respect to agriculture.

In the Western Hemisphere, we have long been engaged in a program of technical collaboration with other American Republics. This type of work is being extended to other areas of the world under the Point Four program.

We are participating wholeheartedly in the work of the Food and Agriculture Organization of the United Nations.

Before the communists gained control of China, the United States in 1948 joined with the Chinese Government in setting up a joint commission to administer economic aid funds earmarked for helping rural Chinese. Two Americans and three Chinese comprised the Commission. On their recommendation, the Chinese Government began to put into effect rent reduction and, in a minor way, land-purchase programs that benefited an estimated 2 million tenants in one province alone.

During our military occupation of South Korea, the United States Military Government initiated the sale to tenants at reasonable prices of lands that had been owned by Japanese. And in Japan, under United States military occupation, a land reform program has enabled more than 3 million farmers—more than half of all farmers in this country—to obtain land. Reports indicate that the communists are now able to make no gains in rural Japan. Thus, practical democracy is competing successfully for the minds of men in Japan, as it will everywhere it is given the chance.

Those countries that want to give opportunity to the tenants to purchase the land on which they work should not lack for support in the United Nations. It has the facilities, and it should be made clear that they are available to help meet problems of social and economic organization as well as of technological assistance. For example, a country planning an irrigation project may find that the benefit to the nation could be increased manyfold by seeing to it that the land to be irrigated is owned by many farmers rather than by a few landlords.

In our administration of Point Four and in our related programs of economic aid, we should make it clear that our purpose is to help the peoples of the world to help themselves. A large part of our effort, of course, must be to carry the practical techniques of production and of extension education to those who want to learn what we have learned. But technical "know how" will not go far toward solving the food problem and building peace where a bad system of land tenure exists. In the main, the chance to benefit is inseparable from the opportunity to own the land. Ownership of the land by the cultivator is the key to individual freedom and free government. To extend this principle is simply to extend a basic tenet of the American Revolution.

Land-Grant Institutions In Point Four

The 'people's colleges' are making an increasingly important contribution to the foreign policy of the United States.

by JOHN A. HANNAH

Growing public recognition of the importance of economic factors in international relations has been accompanied by increasing recognition on the part of all of America's colleges and universities that they have a special obligation to contribute to the development of our foreign policy.

The land-grant colleges and universities are equipped to contribute in all fields of learning and practice, but it is only natural that a major interest lies in the field of producing, processing, and distributing food and fiber. And, since agricultural production is at the heart of so many economic and social problems, it was inevitable that the land-grant colleges should have been advanced—*catapulted* may be a more appropriate word—to the forefront of those institutions that have been called upon to serve the national interest in this period of world unrest.

Within a few days after the President's proposal that this country lend its technical assistance to underdeveloped areas throughout the world in order to improve the lot of their peoples, the Executive Committee of the Association of Land-Grant Colleges and Universities authorized the following message to the President of the United States:

> One of the greatest contributions America can make to the improvement of living standards, elimination of hunger, and fostering of peace in certain parts of the world is by encouraging education in food production, food handling, food utilization, and better home-making and family life among rural and urban people. These have been the objectives, the basic philosophy, and the outstanding role of the Land-Grant Colleges and Universities in American life since the passage 87 years ago of basic legislation for federal-state cooperation in a national system of "people's colleges" dedicated to the "education of the industrial classes in the several pursuits and professions of life." It is time this basic philosophy and the "know-how" developed in more than four-score years of operating under it is extended to the rest of the world on a much broader scale than has been the case in the past. Your message will furnish a powerful impetus in that direction. . . .
>
> We feel that in our international efforts, we would be in position to make a much larger contribution than has been the case heretofore if given a wider opportunity to participate in the planning and carrying out of the program.

Officials of the Federal Government, particularly those of the Department of State and the Department of Agriculture, have accepted this assistance in the spirit in which it was offered and given to the land-grant colleges and universities a generous share of responsibility for planning and executing the Point Four program.

This offer of assistance was made—and accepted, I believe—on the following considerations:

1. The land-grant colleges and universities have a long-proud record of service to the people of America in the field of agriculture. Working together with the United States Department of Agriculture in a unique Federal-State relationship, they have been a major factor in making the United

Representative group of visitors to the United States, mainly agricultural extension workers. Their countries are Austria, Denmark, France, Germany, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Turkey, the United Kingdom.

States the most advanced agricultural producer in the world, in giving America the practical "know how" it now generously offers to export to other nations. The record of agricultural production in this Nation could not have been written without the research programs carried on cooperatively by the States and the Department of Agriculture, or without the extension services carried on cooperatively by local units of Government, the States, and the Department. What could be more reasonable than to continue this happy partnership in seeking to improve agricultural practices and production in the underdeveloped areas of the world?

2. The land-grant colleges and universities are the major sources of the technical personnel required to make the agricultural phases of the Point Four program work. They are sure to be called upon to supply hundreds of trained men and women from among their graduates and faculty members. What could be more reasonable than that they should be called upon to deploy these men and women in a manner that would disturb their normal functions least while contributing the most to the success of the new program?

3. The land-grant colleges and universities have had various degrees of experience over a period of 10 years or more in extending technical assistance to neighboring countries, to others farther away, and to the occupied territories. What could be more reasonable than to build on this experience in developing a program larger in concept and nobler in purpose?

4. The land-grant colleges and universities, by charter and by tradition, have always been interested in the problems of living people and dedicated to the idea that the discoveries of science should be applied to the solution of those problems, particularly in the rural areas of America. What could be more reasonable than to capitalize on that ideal of service in solving some of the problems of men and women in other lands who have not the resources with which to solve their own?

It is generally agreed that the land-grant colleges and universities can be most useful in four related but distinct fields of service. One is the training of Americans to go abroad as agricultural missionaries, so to speak. A second is the training of those who may be chosen to come to America from other lands to see for themselves how we do things here. A third is the loaning of staff members to serve on missions in foreign lands for comparatively short periods. A fourth is the operation by individual land-grant institutions of projects in other countries in cooperation with their governments or educational institutions.

Substantial progress has been made in all four areas.

A major step forward was taken in creating a joint committee of representatives of the United States Department of Agriculture and of the land-grant colleges to "consider broad policies arising from the increasing agricultural services needed in foreign areas, including the training of foreign nationals in this country." This committee developed the plan under which the Office of Foreign Agricultural Relations became the controller of traffic between this country and foreign lands on the part of agricultural students and specialists. Now all visits to this country by those interested in any phase of agriculture are scheduled and regulated by this central office, no matter what their sponsorship. Since the war, 775 foreign students and on-the-job trainees have come from 27 countries to study our agriculture.

In addition, about 3,700 visitors have come here for various periods of time to study special phases of agriculture. Suitable arrangements have been made to reimburse the host colleges and universities for their out-of-pocket expenses incident to the entertainment of such visitors, and plans for coordinating these visits and making them meaningful have been put into effect.

The same committee has been able to bring some order into the system of procuring American specialists for foreign service with the United Nations and Federal agencies by establishing in the Office of Personnel in the Department of Agriculture, a central roster of agricultural specialists available for foreign assignments. This has centralized recruitment and eliminated much wasted effort and duplication.

The several land-grant colleges and universities have been encouraged to select projects in foreign lands in which they would like to cooperate and to apply for funds with which to carry them on. The University of Arkansas is the pioneer in this activity since it will work with the Agricultural School Divisa in Panama on a program of education, re-

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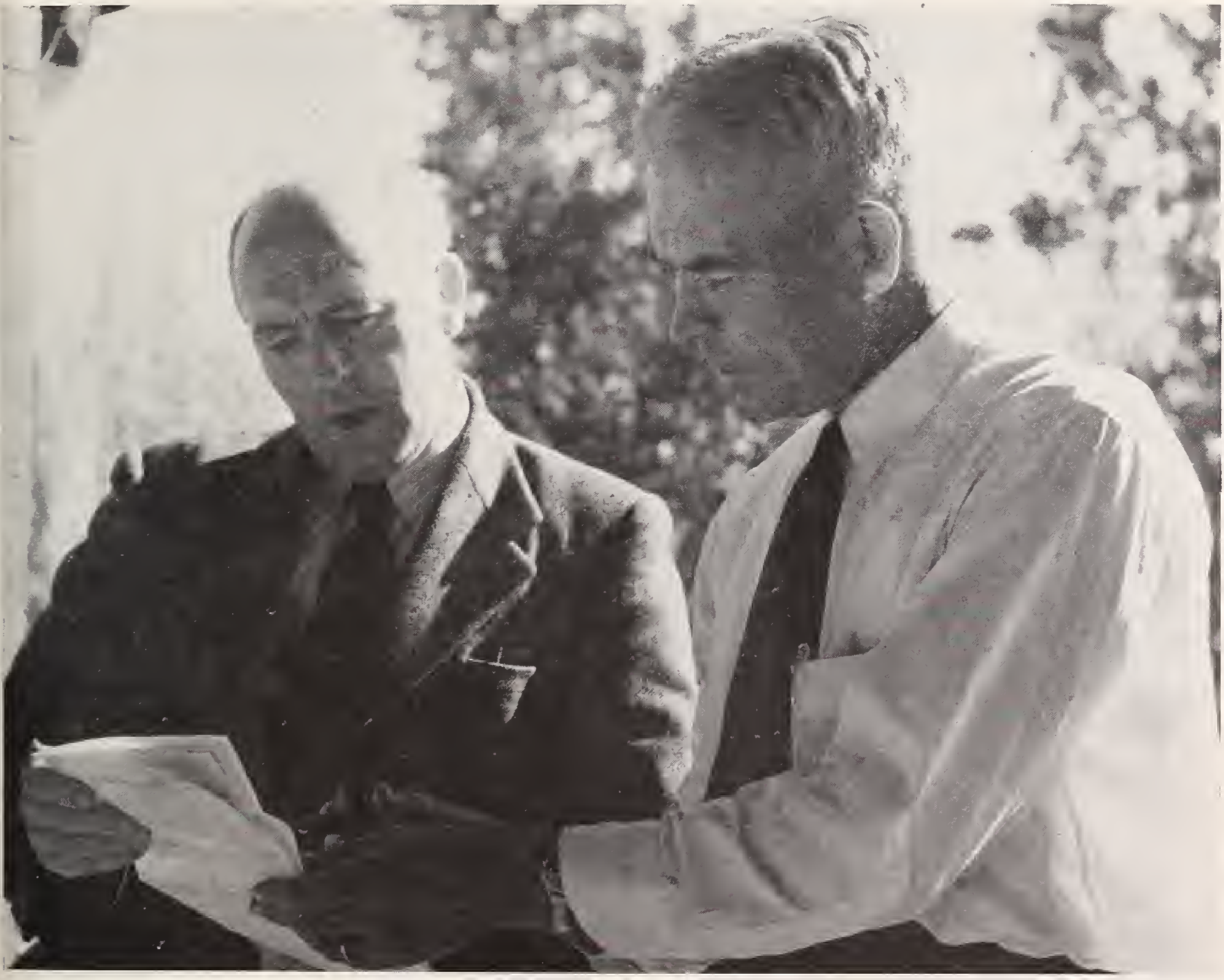
Dr. Hannah, President of Michigan State College and prominently identified with development of the Point Four program, is a member of the International Development Advisory Board and Chairman of the Executive Committee of the Association of Land-Grant Colleges and Universities.

search, and extension under a grant of Point Four funds made by the United States Department of Agriculture. Similar projects are being developed by other land-grant institutions.

The matter of devising special curricula for training United States specialists to be sent abroad is, understandably, subject to much discussion and deliberation, involving as it does the adaptation of traditional American educational methods to special situations. But the land-grant colleges and universities are singularly free from educational standpattism and will eventually arrive at a solution that is in the best interests of those to be served.

These, then, are the circumstances under which the land-grant colleges and universities have enlisted in the Point Four cause and the conditions under which they are serving. But I have the private notion that in the long run their most effective services will not be given in any of the fields laid out above but in a field that has not been mentioned in official discussions.

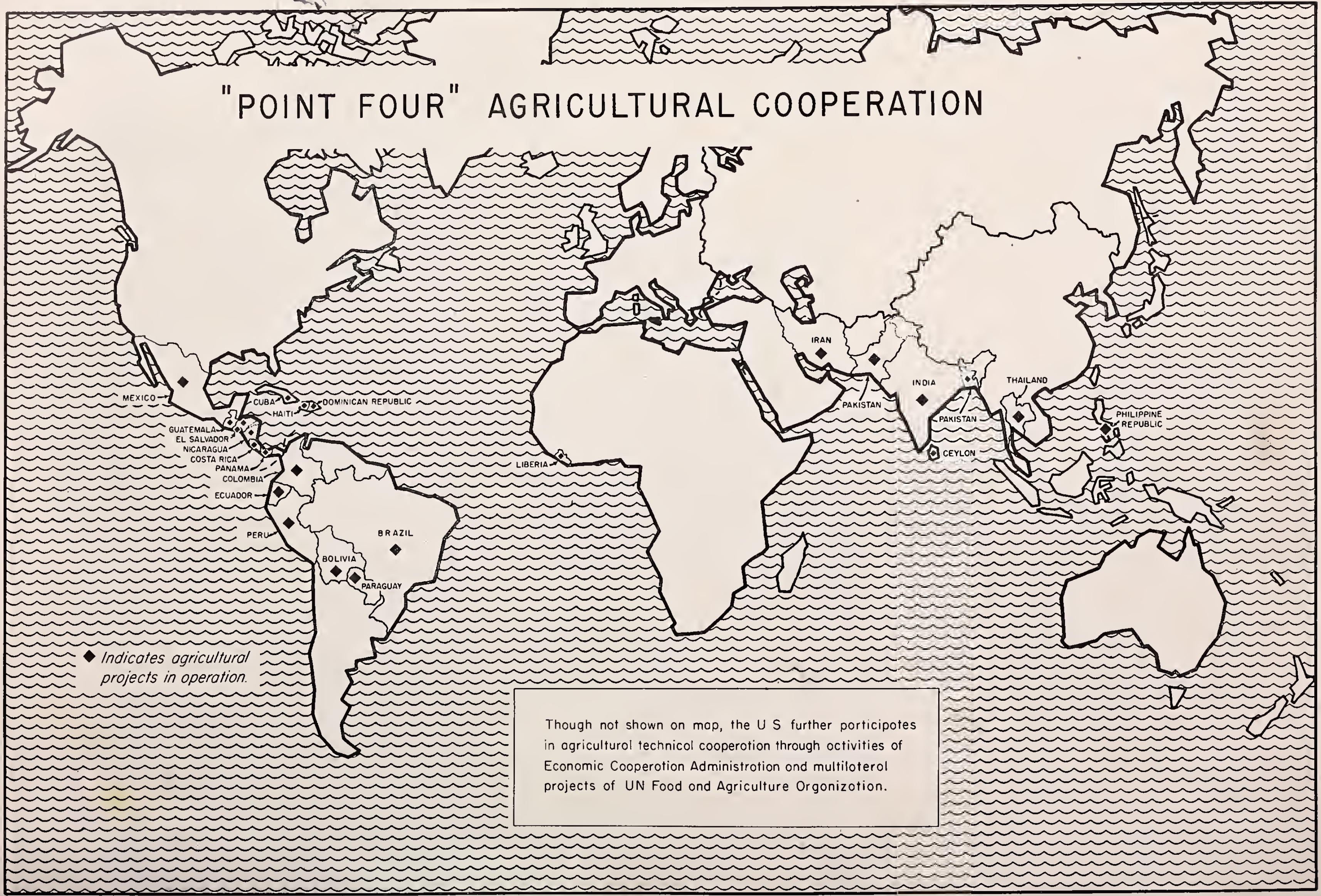
I am confident that in future years when the Point Four program is evaluated, the land-grant colleges and universities will be found to have served America best by giving a convincing demonstration of how individuals, State institutions, and Federal agencies can work together effectively and harmoniously when they serve a cause that is bigger than any of them. They have given such demonstrations of democratic action at its best in our own country and have thrived and grown in the affection and respect of the people in the process. There is no reason to believe that human beings elsewhere in the world will be less responsive to demonstrations of honest and sincere interest in their welfare, and of a desire to serve.



A Welsh farmer (Evan L. Harry), left, discusses agricultural extension methods with an Oklahoma A. & M. Extension specialist (Ford Mercer).

☆ U. S. GOVERNMENT PRINTING OFFICE: 1951

"POINT FOUR" AGRICULTURAL COOPERATION



◆ *Indicates agricultural projects in operation.*

Though not shown on map, the U S further participates in agricultural technical cooperation through activities of Economic Cooperation Administration and multilateral projects of UN Food and Agriculture Organization.